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ABSTRACT

In the academic year of 1968, a substantial number of the 10,000 graduate students at the University of California at Berkeley dropped out of graduate school. This graduate school attrition caused deep concern for several reasons. Primary reasons for concern are the loss of educated manpower to society and the question of whether graduate school admission requirements are indicative of successful students. Thus, a survey was conducted to find out the reasons behind the high attrition rate. The three factors found to be most often cited by dropouts were financial factors, academic factors and personal factors. The study also indicates characteristics of students that completed degree requirements and characteristics of those who left by reason for leaving. (HS)

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GRADUATE ATTRITION AT BERKELEY

University of California, Berkeley

Office of Institutional Research

August, 1972

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GRADUATE ATTRITION AT BERKELEY

Eleanor Langlois

Office of Institutional Research
University of California
Berkeley, California

August, 1972

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I. INTRODUCTION

In the spring quarter of 1968, there were just over 10,000 graduate students enrolled on the Berkeley campus. Many of these students earned a graduate degree or certificate at the end of the spring or summer quarter; but a substantial number of the others did not enroll in the fall. In itself, this is not particularly unusual, although what appeared to be an increase in the number of "dropouts" was cause for concern, especially in view of the then current discussions of the effect of the draft on graduate students. The present study resulted from an attempt to resolve the immediate concern and at the same time to answer some of the long-standing questions about graduate attrition.

Graduate attrition is often discussed in academic circles. One can argue that the evils of the "dropout problem" are exaggerated, because many students who are not registered are continuing their studies on their own or because the nature of graduate instruction is such that students may simply change their minds in the course of it and decide not to complete their degrees. At least from the student's point of view, it is probably a mistake to assume that all attrition is "bad," for few would question that motives and goals are subject to change, and it would be unfortunate if those who did not really want a degree were encouraged to continue to work toward it. Nor should the system become so rigid that a student must appear almost certain to succeed in order to be admitted, so that the faculty no longer has the option of taking a chance on an unproven student.

One also can argue that the situation is a serious one because financial problems have led large number of graduate students to interrupt their studies unwillingly, that graduate programs are badly designed, or that too many students are admitted to graduate study who lack the motivation necessary to finish. There are many graduate students, apparently, who leave Berkeley and other institutions due to circumstances not of their choice, and many of these students probably are academically and otherwise capable of earning the degree they seek. Not only is it often a waste of time and energy and depressing psychologically for these students to pursue a degree unsuccessfully, but it is wasteful for the institution in the sense that with the present level of enrollment limitation, many departments can accept new students only as others

leave, and a student who does not complete his studies successfully in effect has occupied a place which could have been taken by another student. One should keep in mind also that a change of institutions is more complicated for a graduate student than for an undergraduate and often involves a far greater setback for the student.

REVIEW OF THE LITERATURE

Although much of what has been written in recent years about "dropouts" relates either to the high school level or to college undergraduates, the relatively unstructured aspect of graduate education suggests that there are some aspects of attrition which are unique to the graduate level. Berelson, in his book Graduate Education in the United States, notes that although graduate attrition is not high in comparison to undergraduate rates,

> "the matter is perhaps more serious for the graduate school because its selection is supposed to be better; its type of education is much more expensive; and...its drop-outs stay around longer than the undergraduate dropouts..."[1]

Another writer, Alvin Renetzky, points out that

> "At the graduate school level, one can be successful in examinations and courses (analogous to attainment of the degree at the lower level) and, yet, unsuccessful in the long-range goal of graduation."[2]

Many doctoral students who have completed all requirements for the doctorate other than the dissertation look for a full-time teaching job elsewhere on the assumption that they will work on the dissertation while they teach. Although this might solve the student's immediate financial problem, Moody E. Prior points out the seriousness of the interruption just at this time because

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[1]Bernard Berelson, Graduate Education in the United States (New York: McGraw-Hill, 1960), p. 169.

[2]Alvin Renetzky, All But the Dissertation: A Study of the Factors of Attrition in Graduate Education (Dissertation: University of Southern California, 1966), p. 12.

> "once separated from adequate research facilities, from other students, and from the dissertation adviser, and burdened by new full-time professional duties, the student finds himself drifting away from his final academic goal."[3]

Prior notes a variety of other problems inherent in Ph.D. programs; for instance, that the degree is open-ended, that knowledge in many areas is cumulative, and that it is difficult for the student to ascertain when he has completed the necessary amount of study; and he refers to other "subtle and unanalyzable complications" such as the effect of the student's relationship with his adviser, the "different responses of students to intellectual independence," etc.[4]

One of the few longitudinal studies of graduate attrition is that made by Charles R. Wright in which he classified students according to how many earned a degree during an eleven-year period.[5] Although the study is limited by a small sample size (about 200 students) and by the fact that student characteristics are determined on the basis of interviews conducted at the start of the period, some of his findings are interesting. Wright notes, as have some others, that age seems inversely related to the chance of success. Among the characteristics with which Wright finds a consistent, but not statistically significant, relationship to success are study conditions--by which he means a relatively larger number of hours available for study, relatively fewer hours a week spent in employment, and lack of personal worries which interfere with academic work--[6] and among doctoral students, "social adjustment and integration into the graduate community."[7]

Although his student population is very restricted, a study of masters students in education, reported by J. Robert House, makes

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[3]Moody E. Prior, "The Doctor of Philosophy Degree," from Everett Walters (ed.), Graduate Education Today (Washington, D.C.: American Council on Education, 1965), p. 51.

[4]Ibid., p.p. 52-53.

[5]Charles R. Wright, "Success or Failure in Earning Graduate Degrees," Sociology of Education, vol. 38, Fall 1964, p.p. 73-97.

[6]Ibid., p. 89.

[7]Ibid., p. 92.

many similar points. House finds married students less successful than other students and part-time students generally less successful than full-time students. He says that "unsuccessful candidates showed less academic interest in the pursuit of knowledge, per se,"[8] and less successful students were more critical of instructors and more likely to have difficulties with illness or other personal problems. House notes the importance of combinations of factors, rather than any single factor, as explanations of attrition; for example, he suggests that

> "The need for employment, which in turn necessitated part-time enrollment, which together handicapped studies, thus leading in turn to dissatisfaction with grades, could on the basis of the findings be pointed to as one interrelationship of problems leading to student separation from the degree program."[9]

Various segments of the academic community may see attrition differently, as Berelson illustrates in a comparison between the opinions held by graduate deans, graduate faculty, and recent recipients of the doctorate, regarding the "most important" reasons for attrition at the graduate level. On the basis of percentages shown in his study, it appears that deans give considerably more importance to the financial angle than do either of the other groups and are also more likely to say that the students "found the degree wasn't necessary for what they wanted to do," while the faculty are more likely to feel that students who drop out lack "intellectual ability to do the work," and the doctoral recipients give more importance to lack of "physical or emotional stamina" and to disappointment with graduate study.[10]

Although it is predominantly an investigation of student finances, a study undertaken in the late 1950's by James A. Davis offers one of the better discussions of graduate attrition. In this study, which defines a dropout as any student in his sample who had

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[8]J. Robert House, "Graduate Withdrawals: Another Approach," College and University, vol. 41, no. 3 (spring 1966), p. 315.

[9]Ibid., p. 319.

[10]Berelson, Op. cit., p. 169.

left a year later without a final degree, Davis found academic ability to be the best predictor of dropout, and he notes that

> "Although the actual mechanism is unknown--whether the less able students are counseled to leave, whether they are forced to leave, whether they find outside opportunities more attractive than staying in school, etc.--the general trend is for the dropout to be a student of lesser academic potential."[11]

Davis finds no relationship between dropout and morale, personality problems, criticisms of graduate school, or financial worry. The latter is particularly noteworthy, but he also says that "none of this means that financial factors (sources of income, stipends, employment, etc.) were unimportant..." His findings in this respect show that students employed full-time outside of school have quite high dropout rates, students with a "duty stipend" (RA's and TA's) have low dropout rates, and students with fellowships, part-time jobs, or no stipend or job have rates somewhere between the other two groups. According to Davis' study, background variables such as class and religion do not appear important, but age and family role are related to dropout; older students and married students with children appear to have higher dropout rates than other students. Like a number of other writers, he finds that field of study is significant: natural science students appear to have low dropout rates, humanities students high dropout rates, and social science students somewhere in-between.[12] By way of explanation, he suggest that

> "Perhaps there are divisional differences in the custom of finishing graduate study while out of residence; perhaps the curriculum in the sciences has more continuity; perhaps the Ph.D. is more often a prerequisite for employment in the sciences; and perhaps there are numerous other reasons. The fact that the divisional difference holds regardless of other control variables makes it an important statistical predictor, but it gives us little understanding of the mechanism involved."[13]

Finally, although Davis does not generally find "attitudes" to be important, he does note the significance of one particular type of attitude: apparently research-oriented students have somewhat lower

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[11]James A. Davis, Stipends and Spouses: The Finances of American Arts and Science Graduate Students (Chicago: Univ. of Chicago Press, 1962), p. 110.

[12]Ibid., p.p. 110-113.

[13]Ibid., p. 112.

than average dropout rates, students who consider themselves neither researchers or teachers have higher rates, and teachers are somewhere in the middle. Also, self-defined intellectuals have somewhat lower dropout rates than do other students. He comments that

> "Because it is fair to say that graduate schools give the highest priority to research, the next highest to teaching and little stress to other occupational possibilities, and that intellectualism is given high value in graduate school, the conclusion is that, regardless of native ability, the student whose professional values and aims are in line with the values of graduate school is less likely to leave it."[14]

Davis also states that

> "Although there is no statistical proof for the interpretation, the predictor characteristics, except for division, may be thought of at an abstract level as measures of involvement and commitment to the world of graduate school, and thus the probability of leaving may be thought of as a function of the degree of involvement in graduate school and the degree of involvement in the outside world."[15]

The various ideas suggested by these and other writings offer countless possibilities as to the factors associated with attrition, some of which could be investigated in our survey and some of which could not. Unfortunately many of the more complex relationships can probably be explored only through the use of an intensive and carefully conducted interview--an approach which was far beyond the scope of what we could do with available resources.

There are two basic approaches to the study of attrition: One can define dropouts either as "unsuccessful" students--meaning students who in the long run do not earn a degree--, or as those students who leave school at a particular point in time, regardless of whether or not they return to complete their studies at some future date. The first approach is better if one wants to know the magnitude of the problem; while the second approach, aside from the methodological

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[14] Ibid., p. 111.

[15] Ibid., p. 114.

advantage of being conducted over a shorter period of time, has the advantage of including students who stretch the educational process over many years by leaving school and returning one or more times.

The present study, which is concerned with why students leave, rather than with the number who leave, takes the second approach. There is no implication, therefore, that these students are "unsuccessful" in terms of degree earning; in fact a number of them probably will earn graduate degrees from Berkeley. Instead, the analysis focuses on why a particular group of students did not continue their formal education at a particular point in time, although the findings also suggest why students may in fact be "unsuccessful" over the long run.

THE SURVEY

Selection of the population for the present study began with a list of students who were registered for either spring or summer 1968 or both, and who did not continue into the fall quarter 1968--roughly 3,000 students. The first step was to delete students who left with a degree which they probably considered terminal. In the case of students earning a masters, it is difficult to determine whether or not the student had hoped to continue, yet this factor is important to a study of attrition. It was decided to treat the professional masters, but not the academic masters (M.A. or M.S.) as terminal. The definition finally arrived at--students who had earned no degree in either spring or summer or who had earned an academic masters at the end of either of those quarters--produced a population of just under 1,800 students.[16] Each student was sent a questionnaire which asked why he had left Berkeley (see Appendix A for a copy of the letter and questionnaire).

Because of the way the study population was determined, two special categories of students were anticipated. First of all, the organization of the University's quarter system calendar at the time of the survey allowed the student to skip any quarter of the academic year and still be considered in continuous attendance. Under this

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[16] In the selection process, law students and intercampus exchange students also were excluded from the study population.

ruling, some of the survey students who had attended summer may have been planning to skip fall. Such students were told to note this and not complete the remainder of the questionnaire. A second, and more difficult, problem arose with respect to those students who left with an academic masters. It was our intention to offer the student who had left in this manner the choice of either stating that this was his own preference rather than a result of departmental action, direct or indirect--in which case he should not complete the remainder of the questionnaire--or discussing his reasons for leaving--an alternative chosen by very few students. A brief discussion of students who left with an academic masters is provided in Section V.

Any student who did not exclude himself by use of one of these two special categories was asked to complete the entire questionnaire, describing those factors which influenced him in his decision to leave Berkeley. A few of these students were highly negative about the content of the questionnaire; however, the vast majority attempted to be helpful, although their reasons for leaving may have been negative. Over 100 students elaborated on their motives using the "other, please specify" option, and these responses were coded into nine categories which were used in the analysis.

In addition to the survey data, we collected from the Registrar's records several bits of information on each student in the survey, whether or not he completed and returned the questionnaire: his grade-point average when he last attended, whether or not he earned a degree, whether or not he was a legal resident of California, the locality he considered his permanent home when he was first admitted to the graduate division at Berkeley, his major, his sex, and his graduate degree objective (and in the case of doctoral students, an administrative classification of his current progress toward that degree). Since these data were collected for all students surveyed, we are able to evaluate the response in terms of the types of students who did and did not return the questionnaire.

One of the common problems with questionnaires is that in retrospect the questions asked often do not provide just the information

one really wanted. This is particularly true of surveys such as this one where the immediate motivation was very specific--to determine the effect of the draft. In one sense, in particular, the questions used in the present questionnaire prove to be somewhat awkward: they offer some very broad categories and several very narrow ones which could have been considered together, and they omit at least one (now) obvious one: loss of interest in the field. Certainly some students would have cited this factor if it had been offered to them as part of the checklist, and some of these students may have used "dissatisfaction with the program" in this way, although the meaning is not really the same.

Whatever path such students followed, this omission points up very effectively one of the more important limitations of dropouts studies--the question of whether the reasons as stated accurately describe the students' motivations. Some respondents probably will take the easy way out and will use the alternatives presented by the questionnaire rather than suggesting others which would more accurately or completely explain the situation. In other cases, the reasoning behind the decision to leave may be ill-defined in the mind of the student himself; and if the questionnaire does not include a particular alternative the student may not think of it, although if it were suggested to him he would consider it to be influential in his decision.

THE SURVEY RETURN

Of the nearly 1,800 students included in the survey, 48% completed and returned the questionnaire, 50% apparently received the questionnaire but did not return it, and 2% did not receive the questionnaire--it was returned unopened by the Post Office, due to insufficient address. The distribution of students, in terms of whether or not they returned the questionnaire, and how they responded if they did return it, is shown in Table 1. The result is a total of 419 students who gave their reasons for leaving.

Table 1

DISTRIBUTION OF STUDENTS ACCORDING TO
WHETHER OR NOT THEY RETURNED THE QUESTIONNAIRE,
AND IF SO THEIR TYPE OF RESPONSE

Type of Survey Response	Number of Students	Percent of Students	Percent Distribution of Students Who Completed Questionnaire
Questionnaire not returned	889	50	-
Questionnaire returned unopened by post office	35	2	-
Total not completed	924	52	-
Questionnaire completed:			
Student skipped fall	86	5	10
Student earned degree and did not continue	358	20	41
Student left without degree (gave reason)	419	23	48
Student gave no reason for leaving (returned questionnaire blank)	2	*	*
Total who completed questionnaire	865	48	100
Total in Survey	1,789	100	-

*Less than 0.5%

Not surprisingly, certain categories of students were somewhat more likely than others to have returned the questionnaire. A comparison of those who returned it with those who did not, shows considerable similarity between the two groups; however, the group who returned the questionnaire contained, proportionately, more women students, more California residents, and more students with high grade-point averages. A detailed comparison of these groups is shown in Appendix B.

II. SUMMARY OF THE FINDINGS

In dealing with a topic of this sort, the technical nature of the material presents a considerable problem. One must be careful to properly qualify the data and to note methodological points which could lead to misunderstandings; yet the result often is that the material is made unreadable. For this reason, the primary findings of the present study are presented in a non-technical manner in this section, followed in Sections III through V with a more detailed and numerical presentation.

Number of reasons given. For many students it appears that the decision to leave school is a simple one, based on one or two factors, while for some it is very complex. Nearly half of the students in this survey gave only one reason for leaving. Although many students indicated that they were influenced by two, three, or four factors, very few cited five or more. In some cases, students cited two or more factors which are so closely related that they amount to a single reason. For instance, many students cited "continued in non-registered status" along with another factor such as "sought full-time employment." For some students who cite several reasons for leaving, it is likely that no one reason would be sufficient in itself, but sooner or later the combination becomes strong enough to influence the student's decision.

In order to get some overall notion of the students' motives for leaving, the analysis summarizes the responses under four general headings: financial, academic, personal, and unclassified. These groupings, like any such classifications, are arbitrary, but useful so long as one does not take them too seriously. On this basis, the factors chosen by the students were as follows:

Grouping of Factors	Percent of Students Selecting at Least One Factor from Group
Financial	46%
Academic	20%
Personal	30%
Unclassified	63%

The very high 63% who cited one of the "unclassified" factors is largely the result of the students who indicated that they "continued in non-registered status," a factor used to indicate an interruption of formal registration, and which may or may not indicate an actual departure from the campus. Excluding this one factor, which accounted for more students than any other in the survey, financial factors were most frequently cited, with nearly half of the students selecting at least one factor classified in this manner. The vast majority of the students who cited one of the financial factors selected either "lacked funds to continue" or "sought full-time employment" or both. Apart from "continued in non-registered status" and these two financial factors, the most frequently cited reasons for leaving were "dissatisfaction with the program" and "enrolled at another institution." Since the effect of the draft was one of the immediate motivations for this study, it should be noted that the number of students who selected one of the military variables was less than for any of the factors already discussed, but was appreciable, nonetheless. Most of these students said they expected the draft, rather than that they had enlisted or had been drafted.

Reasons considered most important. Some of the reasons given were generally considered by the students who cited them as their most important reason for leaving, while others were less likely to be thought of in this manner.

With the exception of the factors specified by the students themselves, which one would expect to be very important to them, "continued in non-registered status," was most frequently selected as the most important reason for leaving and as the only reason for leaving. Presumably most of these students, at least at the time they left, intended to complete their degree at Berkeley; although for a variety of reasons, some of which have been discussed in the literature, it is often difficult for such students to stick to their original plan. Another factor from the questionnaire checklist which frequently was selected as the most important reason and often the only reason for leaving was "enrolled at another institution." Among students who said they enlisted or expected the draft about half said this was their most important reason for leaving, but of those who said they had been drafted surprisingly few said this was most important.

On the other hand, only about one-third of the students who selected either of the two financial factors which were very popular considered one of these as their most important reason and relatively few gave either of these as their only reason. One thing to keep in mind here is that many students cited both of these factors, but of course could designate only one as most important. "Dissatisfaction with the program" was cited in a manner similar to the two financial variables--about one-third of the students who cited it considered it their most important reason, but few gave it as their only reason.

Student characteristics and reasons cited. It is encouraging that when one looks at the reasons and combinations of reasons cited by particular types of students, although the numbers in some categories are small enough that only substantial percentage differences can be considered meaningful, the patterns generally seem to make sense. Even where the categories are not small, one must be cautious of course, in assuming causal relationships, for very often the relationship between any of these characteristics and reason for leaving is produced by some other factor.

Several reasons for leaving were cited by large and roughly similiar proportions of both men and women. This is true of "continued in non-registered status," "lacked funds to continue," and "dissatisfaction with the program." "Enrolled at another institution," on the other hand, was cited by more men than women, and the same is true of "sought full-time employment," although to a lesser degree. Although the numbers involved are not large, it appears that men were more influenced by the military factors and women by some of the other personal factors. Women were much more likely to cite "enrolled for a limited time only."

The type of degree toward which the student is working, and his progress toward that degree, appear to have a strong relationship to the reasons why he decides to leave. "Continued in non-registered status " was selected by about one-fourth of the students who were working for a certificate or masters degree, but a far higher proportion of those working for the doctorate. Among students working for the doctorate, this reason was given relatively infrequently by those at the beginning

level, but by over three-fourths of those at the most advanced level--those who had been advanced to candidacy.

The two frequently cited financial variables were mentioned by many students regardless of their degree level, with the exception that "lacked funds to continue" was cited less frequently by beginning doctoral students who seemingly did not start their studies unless they had enough support at least to see them through this period.

"Dissatisfaction with the program" was indicated most frequently among beginning doctoral students, and--as one might expect--relatively rarely among students advanced to candidacy for the doctorate, since presumably these students have had plenty of time to ascertain whether the program meets their expectations. Students citing "enrolled at another institution" followed a somewhat similar pattern in that among doctoral students the frequency with which this factor was mentioned was less among the more advanced students.

Although they do not account for large proportions of the students overall, the military variables, as one would expect, were cited primarily by students at the masters and beginning doctoral level, "enrolled for a limited time only" accounted for more masters than doctoral students, and students who cited "studies completed, no degree yet" were almost exclusively doctoral students who had been advanced to candidacy.

Field of study almost certainly relates to reasons for leaving in some way, but the combined effect of small numbers of students and the influence of next degree objective is sufficient to obscure the relationship except in a few instances. "Lacked funds to continue" was cited by a somewhat similar proportion of students in most fields of study--only biological sciences seemed to be affected slightly less than the others. The other frequently cited financial variable, "sought full-time employment," accounted for larger than average proportions of students in the arts and in engineering, although in the former case, the number of students is too small for a percent difference to be meaningful, and for a smaller than average proportion of students in agriculture and forestry.

"Continued in non-registered status" was cited by somewhat similar proportions of students in all fields except engineering and social sciences. In all likelihood, the lower than average number of engineering students who cited this factor may result from the high concentration of masters students in these majors; however, in the case of social sciences, attempts to check out this relationship show that both at the masters level and the advanced doctoral level, social science students were more likely than average to cite this reason, thereby suggesting that this in fact may relate to the nature of the disciplines themselves, rather than just to degree level.

One further relationship appears noteworthy with respect to field of study. Students in agriculture & forestry and in the arts--particularly in one program in each of these fields--appeared unusually likely to indicate "dissatisfaction with the program." Any judgments on this basis should be made cautiously, but areas such as this probably would merit further study.

Regardless of one's feelings about grade-point average as an indicator of academic success at the graduate level, a student's average does appear related to his reasons for leaving. One factor "continued in non-registered status," was cited much more frequently by students with high averages--3.500 and above--possibly because this group included many of the most advanced students. Factors cited more frequently by students with averages below 3.000 included "dissatisfaction with the program," "sought full-time employment," "personal illness," and "job-related reasons,"--relationships which seem plausible although grades certainly are not always the causal factor.

Comparing the reasons cited by foreign students and U.S. students, it appears that foreign students were much more likely to indicate that they "lacked funds to continue" and more likely to say that they "enrolled for a limited time only" or had "enrolled at another institution," often meaning that they returned home. Foreign students were less likely to indicate "dissatisfaction with the program, "and were less likely to cite either the draft or some of the other personal factors. Among U.S. students the most striking contrast is in the much larger proportion of California residents, as compared to non-residents, who cited "continued in non-registered status" as a factor. Out-of-state students who had become California residents were most likely to cite "lacked funds to continue" and "sought full-time

employment," and out-of-state students who were not California residents were most likely to cite the military variables.

The academic masters. Because of the varying circumstances under which students leave with an academic masters degree, the survey attempted a brief exploration of this area, although no attempt was made to "put the student on the spot" in explaining his situation. Although we know very little about these students, it does appear that at least at the start of the last quarter in which they enrolled, the vast majority indicated that they were seeking the masters rather than the doctorate. It also appears that an appreciable number were in majors where many students do not work for the doctorate. Such findings may mean that the number of students who are terminated by their departments via an academic masters may not be very large.

Evaluation of the problem. This rather complex array of statistics still leaves one wondering what the dropout problem is all about. Although the findings of studies such as this may provide insights, they leave much still to be determined, and at the same time raise questions as to the usefulness of pursuing the idea on any large scale.

It seems that there are many reasons why students leave graduate school and that the "balancing effect" of these may preclude correlation with other variables. Moreover, it seems that some students have one overwhelming reason for what they are doing; others have a variety of lesser reasons which sometimes in the aggregate become sufficient that they leave. Although the responses on the present questionnaire seem to make sense, one is always faced with the question of the extent to which they express the real reasons as distinguished from those which are socially acceptable and will make sense to others. Several writers have noted that success in graduate school is largely governed by how well one plays the game, by a process of "socialization" as it were. To the extent that this is true, presumably the dropouts would be less concerned with conforming to expectations than those who earn a degree, and therefore more likely to give honest answers in a survey. One also would think that an unofficial survey might produce more candid answers than those given on a withdrawal petition. One always wonders, nonetheless, about the validity of survey replies.

On the other hand, it is very possible that in looking for complex motivations for the students actions we are searching too deeply, and that for many students the explanations are as simple as they appear on the surface. Certainly it would seem that the reasons as stated are important; for most students one suspects that there may be other factors as well, but these may always be beyond the institution's knowledge and may in fact not be entirely within the student's understanding.

Another major question involved is whether or not dropping out is "bad." As suggested in the Introduction, this may depend on whether one takes the institution's point of view or that of the student. Attrition always signifies some use of resources which does not lead to a degree, and when financing is scarce or enrollments are controlled for some other reason, registering an unsuccessful student prevents another student from having a chance to earn his degree during that period of time. From the student's point of view, dropping out is a negative thing if it results from the action of the institution or some outside force against his will, but it may not be negative, if he leaves because his interests have changed or if he decides he would rather study elsewhere.

In certain circumstances, it seems that attrition, whether good or bad, is unavoidable. It is unlikely that admissions procedures will ever become so sophisticated that they can predict accurately who can succeed, and equally unlikely that any system can become so straightforward that all who originally feel that they want to seek a graduate degree in a specific field will persist. Certainly some of the outside forces leading to attrition cannot be controlled. Assuming that we will always have some degree of attrition, what should cause concern is that the level may be increased, sometimes to a considerable extent, by factors over which the institution has control--principally its program. It would seem that any additional analysis should be concentrated, therefore, not on further delving into the student's motivations in general, but specifically in certain areas where the institution and its policies are directly involved. A further advantage of this approach would be that by focusing on particular areas of attrition, it is possible that a study population covering several years could be collected, so as to avoid some of the extremely small categories which complicate an analysis such as this one.

III. REASONS FOR LEAVING BERKELEY

The number of students who cited each item on the questionnaire checklist as being "influential," is shown in Table 2, with the "other, please specify" responses coded into nine categories. The first column of percentages is based on the 419 students who completed the questionnaire and gave their reasons for leaving, and therefore adds to 195%, indicating that each student, on the average, considered about two reasons as "influential." The total number of students (419) rather than the total number of responses (818) is used as the base for percentages throughout the study. The various combinations of reasons and the number of students citing each combination are shown in Appendix C, so that the reader may derive any grouping in which he may be particularly interested.

Table 2 also shows the proportion of those students who selected each factor who thought that factor either the most important reason why they left Berkeley or the only factor involved. Among the 123 students who chose to specify a factor which was not mentioned on the questionnaire checklist, 73% said that the factor they specified was the most important reason why they left. Presumably students who bothered to write in a reason, would be more likely than average to consider this reason very important.

FINANCIAL FACTORS

Forty-six percent of the students cited one or more of the factors grouped under the general heading "financial," with most of these students citing "lacked funds to continue" and/or "sought full-time employment," as noted in Section II.

Lack of Funds. One-fourth of the students who gave reasons for leaving said that lack of funds to continue was influential in their decision to leave; however, this reason was not often given alone. Sixty percent of the 106 students citing this factor also indicated that they sought full-time employment, 16% indicated that they had enrolled at another institution, and 30% indicated that they were dissatisfied with the program at Berkeley.

In response to a more specific question as to the reason for their financial difficulties, over half of the students who said that they "lacked funds" indicated the unavailability of a grant, fellowship, assistantship,

Table 2

STUDENTS' REASONS FOR LEAVING BERKELEY

Reason for Leaving*	Students Designating Reason as "Influential"		Percent of Those Influenced Who	
	No.	Percent***	Thought Reason "Most Important"	Gave No Other Reason
FINANCIAL FACTORS:				
Lacked funds to continue	106	25	38	6
Sought full-time employment	137	33	31	7
Job-related reasons**	17	4	82	47
Miscellaneous financial reasons**	6	1	67	17
ACADEMIC FACTORS:				
Dissatisfaction with program	71	17	35	6
Terminated by department**	5	1	40	20
Miscellaneous academic reasons**	17	4	71	29
PERSONAL FACTORS:				
Needed break from studies**	10	2	80	20
Voluntary military service	16	4	30	25
Involuntary military service	19	5	16	5
Expected to be drafted	47	11	53	11
Personal illness	12	3	33	17
Illness of another person	2	†	50	-
Marriage	34	8	9	6
Pregnancy or birth	12	3	50	17
Miscellaneous personal reasons**	22	5	73	45
UNCLASSIFIED FACTORS:				
Continued in non-registered status	172	41	63	47
Studies completed, no degree yet**	13	3	92	69
Enrolled at another institution	67	16	60	37
Enrolled for limited time only**	27	6	74	52
Unrest at Berkeley**	6	1	67	17
TOTAL NUMBER OF RESPONSES	818	-	-	-
TOTAL NUMBER OF STUDENTS	419	-	-	-

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.
***All percentages are based on the 419 students who completed the main portion of the questionnaire and gave their reasons for leaving Berkeley.
†Less than 0.5%

etc., about a third indicated the increase in University fees, while a third also indicated unavailability of employment with salary adequate to their needs. Smaller proportions indicated reductions in family support or offers of better support from other institutions, but 26% specified a factor other than those we listed on the questionnaire (see Table 3). Although a variety of reasons were expressed in the "other" category, many of the students' reasons can be summarized into one of three categories: the feeling that they couldn't incur any more debts and in fact should start paying off some they already had, the feeling that the income from their various sources just wasn't sufficient for their needs, or the appearance of an unexpected expense when presumably they had just been able to manage. Of the eleven students who said they received an offer of better financial support from another institution and specified the institution, four named Ivy League schools, two named other U.C. campuses, and four named foreign institutions.

Sought Full-time Employment. This reason was probably given both by students who left Berkeley in order to take a job and by students who decided to leave Berkeley for other reasons and subsequently decided to seek full-time employment. Regardless of whether this factor is cause or effect, 33% of the students indicated that it was influential.

All students who indicated that they sought full-time employment were asked whether or not they intended this as a temporary or a permanent interruption of their studies. Of the 115 students who answered the question, 72% said that they intended the interruption to be temporary. The remaining 28%, who apparently intended to leave Berkeley permanently, appears to include somewhat more than the usual proportion of students with cumulative grade-point averages under 3.000-- 26% of these students as compared to 12% of all students who gave reasons for leaving.

Job-Related Reasons. Four percent of the 419 students specified a reason which was coded into this category, and of these students 82% thought this their most important reason for leaving and 47% gave it as their only reason. The factors coded into this grouping include an employed person being called back to his job, the company being transferred away from the Bay Area, acceptance of a position which would not permit part-time study,

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Table 3

REASONS GIVEN FOR FINANCIAL DIFFICULTY BY STUDENTS WHO SAID THEY WERE INFLUENCED BY "LACK OF FUNDS TO CONTINUE"

Reason for Financial Difficulty	Number of Students			Percent of Students Citing this Reason***
	Citing this Reason Alone	Citing this Reason Along with Others	Total	
Increase in university fees	5	28	33	32
Unavailability of grant, fellowship, assistantship, etc.	18	39	57	56
Unavailability of employment with salary adequate to needs	9	25	34	33
Reduction of family support (spouse, parents, etc.)	5	10	15	15
Offer of better financial support from another institution	4	10	14	14
Other*	9	18	27	26
Total Number of Responses	50	130	180	
Total Number of Students	50	52	102**	

*See text, page 20, for a discussion of this category.

**Four students who cited "lacked funds to continue" did not answer this question.

***All percents based on the 102 students who answered this question.

or the fact that classes needed by the student were not offered in the evening hours and were therefore not available to a person employed full-time. Teachers returning to their positions were not included in this category, since generally they had come to Berkeley with the understanding that they would enroll for a limited time only--either a sabbatical year or a summer quarter.

Miscellaneous Financial Reasons. One percent of the students cited reasons which were coded as miscellaneous financial factors: for example, a part-time student wanted to avoid increased fees for four units of work, a student's spouse wanted to register and they couldn't afford both fees, and a student who couldn't afford the non-resident fee was waiting out the period necessary for legal residence.

ACADEMIC FACTORS

Twenty percent of the students cited "dissatisfaction with the program" and/or an "other" reason which was coded as either "termination by the department" or put into a "miscellaneous academic" category.

Dissatisfaction with the Program. This factor was indicated as influential by 17% of the students. It is difficult to establish just what these students meant; for, although it was intended that this factor would refer to the academic side of the program, it is possible that some of the students referred to the level of financial support. The possibility of a financial interpretation is given substance by the fact that over half of the students who selected this reason also indicated either lack of funds to continue or that they sought full-time employment or both. One-fourth of the students who cited this factor said that they enrolled elsewhere.

Terminated by the Department. This category includes the very small number of students who said specifically that they had failed their examinations (orals, qualifying, or masters comprehensive) or indicated that their work was in some way unacceptable to their department. These students could as easily have been included in the "miscellaneous academic" group, but they were counted separately since they represent a category in which there has been considerable interest. The number of students citing this reason almost certainly constitutes an understatement; others may have indicated that they

received a masters and didn't choose to go further, or they may be included in the "dissatisfied" category, or they may have chosen to explain their departure in some other way, possibly by not returning the questionnaire.

Miscellaneous Academic Reasons. The miscellaneous category, which includes reasons given by 4% of the students, includes predominantly those students whose major professor left Berkeley, students who couldn't get into the program of study they wanted (the education certificate was mentioned by several students), and students who had difficulties with registration procedures, etc.

PERSONAL FACTORS

Included among the 30% of the students who indicated that they were influenced by one or more of these factors are students who said they needed a break from their studies, students influenced by the draft, and students who said they left because of marriage, pregnancy or birth, or illness.

Needed a Break from Studies. Relatively few students (2% of those who gave reasons for leaving) used the "other, please specify" category to indicate that they needed to take a break from their studies for one reason or another, but over half of those who did considered it their most important reason for leaving. These students indicated the need to evaluate their goals and their progress toward those goals, or that they were fatigued and needed a rest, or that they were bored with their studies. The usual motivation here seems to have been either personal or academic, but not financial, an impression substantiated by the finding that one factor mentioned by many students in the survey--lack of funds to continue--was mentioned by only one of these students.

Military Service. As indicated in the introduction, one of the specific motivations for the present study was the question of whether the apparent increase in graduate attrition in 1968 was an effect of the draft, either real or anticipated. Because we were interested in being as specific as possible on this point, three alternatives were offered the student on the questionnaire checklist rather than just one: voluntary military service, involuntary military service, or expectation of the draft. The three reasons were cited by 4%, 5%, and 11% of the students respectively.

Since more students checked "expected to be drafted" than checked either of the other two factors, one might conclude that the threat of the draft was of more importance in terms of numbers than the draft itself. Our original intention was that these three factors would be mutually exclusive, or at least that one would not check both involuntary military service and expectation of the draft. This was not the interpretation made by the student, for some selected both factors. One possible way of interpreting these figures is to say that any student who selected expectation of the draft probably had not yet been drafted, although if he checked both, he was probably certain that the draft was unavoidable. On this basis, it would appear that the vast majority of students concerned with military service were anticipating the draft but had not actually been drafted. When students were asked whether, if they had enlisted, it was as an alternative to being drafted, most said that this was the case.

Illness. Only 3% of the students cited personal illness as a reason for leaving, while less than 1% cited the illness of another.

Marriage. Eight percent of the students who left gave marriage as a reason for leaving, although very few considered it their most important reason. Roughly three fourths of these students also cited "lacked funds to continue," "sought full-time employment" and/or "dissatisfaction with the program." It should be noted, that this factor apparently was used both by students who were getting married and those who had marital difficulties.

Pregnancy or Birth. Only 3% of the students cited pregnancy or birth as a reason for leaving, and just half of these considered it the most important factor, one explanation probably being the fact that this factor was cited by almost as many men as women.

Miscellaneous Personal Reasons. Like the other miscellaneous categories coded from the questionnaire, this category, which was cited by 5% of the students, contains a variety of responses. Most of these students had left the Bay Area because their spouse was either studying or employed elsewhere, a few simply indicated that they had left the country, at least one student indicated that he had left Berkeley because he was now draft exempt, and we found that a few students had died. For over 70% of the students whose responses were coded into this category, the factor they specified was their most important reason for leaving, and for 45% it was the only factor.

UNCLASSIFIED FACTORS

The grouping "unclassified" has been used here to indicate factors which could not be clearly included in one of the other three areas; however, it in no way implies an unimportant category, in fact 265 of the 419 students (63%) indicated one or more of these factors.

Continued in a Non-Registered Status. This factor does not constitute dropping out in the usual sense, for presumably the intent here is not an interruption of study although it is an interruption of formal registration. A number of these students may have found full-time teaching jobs at another institution, and hope to complete their degrees while fulfilling their professional duties. Others may be students whose studies involve large amounts of independent reading or research--sometimes at considerable distances from Berkeley; and such students may have felt that since they would have no formal connection with the University during this period, they should not be obligated to pay fees. Some of course may also be students who have interrupted their formal studies for financial or other reasons and hope to continue for a period on their own. Some presumably are continuing their studies, on their own, in Berkeley.

Such students often are not denied the advice of their professors--an important consideration, since over 60% were advanced doctoral students. Although they may take up a considerable amount of faculty time, they are not included in departmental enrollment or workload figures. Also, as noted by at least one of the studies reviewed in the Introduction, such students often are interrupting their studies at a critical time and some may underestimate the demands of the job they have taken on. At various times, regulations have been passed which aim to prevent, or at least minimize, this situation; but enforcement seems to vary considerably among departments.

As noted earlier, this factor was cited by more students than any other reason for leaving--41% indicated this factor either by itself or in combination with other factors. Among students influenced by this factor, 63% considered it the most important reason why they were not registered, and nearly half said it was the only reason. As one might expect, there are strong financial considerations expressed here; 40% of these students, or 75% of the students who cited this factor along with others, also cited one of the financial factors.

Studies Completed, but Degree Not Conferred. The 3% of the students who specified reasons which were coded into this category are, for the most part, students who claimed to have finished all requirements for their degree--including the thesis or dissertation--by the end of the summer quarter, but for one reason or another had not received it in September. Presumably most would have received their degree in December, although a few, based on their statements, may have taken longer, since final faculty approval had not been received.

Enrolled at Another Institution. Sixteen percent of the students indicated that they intended to enroll at another institution. Potentially these students are of particular interest since their motivation for leaving may be university-related, rather than based on technical factors or factors which are outside the control of the institution. Because of the way the questionnaire was worded, students who indicated this factor may have decided to enroll elsewhere after deciding to leave Berkeley for other reasons; but their responses when asked to state briefly the reason for their action, generally give the impression that they left Berkeley with the intention of enrolling elsewhere. Of the 67 students who said they enrolled elsewhere, 60% said this was their most important reason for leaving and 37% said it was their only reason.

Of those who indicated this factor along with others, about 40% expressed dissatisfaction with the program as a concommitant reason. Even among these students, the explanations as to why they enrolled elsewhere varied considerably. Some students were negative, saying that they disliked the Berkeley atmosphere or their particular program or both; some indicated that the institution to which they had gone offered a better program or sometimes a better atmosphere for learning; and some indicated that they had gone to institutions which offered programs not offered at Berkeley, or to institutions where they had offers of financial support.

Most of these students specified the institution at which they enrolled. As the figures in Table 4 show, nearly half went either to an institution in the eastern U.S. or to another University of California campus. A list of the specific institutions is shown in Appendix D.

Table 4

REGIONAL DISTRIBUTION OF INSTITUTIONS SELECTED BY STUDENTS WHO LEFT BERKELEY TO ENROLL ELSEWHERE*

Location of Institution	Number of Students	Percent of Students
Eastern U.S.	15	25
Midwest	7	11
South	6	10
West:		
University of California	(14)	(23)
Other	(11)	(18)
Total West	25	41
Foreign Institutions	8	13
No response	6	**
TOTAL	67	100

*See Appendix D for list of institutions
**Percents based on the 61 students who specified an institution

Enrolled for Limited Time Only. Six percent of the students used the "other, please specify" option to indicate that they had come to Berkeley for a limited time and did not expect this particular span of attendance to result in a degree. Although the reasons specified were similar in some respects to those grouped as "job-related" and classified as financial, departure from the campus in these cases did not appear to arise from unforeseen problems. Teachers who had come to Berkeley for a sabbatical year or to enroll for the summer quarter only were included in this category.

Unrest at Berkeley. Fewer than 2% of the students indicated a reason for leaving which was coded into this category, although it is probable that there were others for whom this was a factor. Generally, these students indicated dissatisfaction with the overall atmosphere at Berkeley; however, for at least one of them, criticism seems to have been directed at the department rather than at the campus as a whole.

IV. REASONS FOR LEAVING CHOSEN BY PARTICULAR TYPES OF STUDENTS

In analyzing reasons for leaving Berkeley, it seems that particular student characteristics are sometimes related to the reasons cited as influential. Tables 5 through 9 present the students' reasons for leaving in terms of five characteristics: the student's sex, next degree objective and progress toward that degree, general field of study, academic standing as measured by grade-point average, and home locality and legal residence. Reasonable care must be taken in drawing conclusions from the tables because very few students are included in some of the categories; however, as noted in Section II, the responses generally seem reasonable.

Analysis on the basis of such characteristics could be carried on almost indefinitely by making progressively finer and finer divisions of the student population; but such a level of detail is not the intent of the present study, nor would it be meaningful, given the size of the study population. More detailed analysis often can be useful, however, in suggesting relationships which merit further attention. In an attempt to point out some potentially interesting areas, the remainder of this section explores one reason for leaving which may be program related: the frequency with which students cite "lacked funds to continue."

Overall, one-fourth of the students who gave reasons for leaving cited this factor, but as Tables 5 through 9 show, this is not always the case for particular categories of students. "Lacked funds" was cited by fewer women than men, by fewer beginning doctoral students than students at other degree levels; by fewer students in the biological sciences; by fewer students with grade-point averages of 3.500 and over; and by fewer U.S. than foreign students.

Since the frequency with which foreign students cited "lacked funds" was considerably greater than among U.S. students, 43% compared to 23%, one approach to an analysis would be to see whether this difference is produced by any particular category of foreign student. Although the number of foreign students is small, data such as those shown in Table 10, where foreign and non-foreign students are compared in terms of a variety of characteristics, suggest that this difference occurs within most categories of students,

although the degree of differences varies. It would seem that foreign students as a group are particularly likely to leave Berkeley due to lack of funds.

Taking a different approach and combining all students working for a certificate or a masters into one group and the three levels of doctoral students into another, the data shown in Table 11 suggest that the latter are slightly less likely to cite "lacked funds," 26% compared to 24%. Comparing these students in terms of both sex and degree objective, it appears that it is women doctoral students who are least likely to cite "lacked funds."

On the basis of data presented in Tables 8A and 8B, one would say that students with high grade-point averages--3.500 and over--are less likely to cite "lacked funds" than are students with averages of 3.499 to 3.000 or those below 3.000. The data shown in Table 11 indicate, however, that this relationship holds only among certificate and masters students, for the small number of doctoral students with averages of less than 3.000 appear unlikely to cite this factor. One certainly cannot infer from this that doctoral students with averages below 3.000 have no financial problems, but only that these problems, if they exist, are not the factors which influence such students to leave Berkeley. Further investigation reveals that while only one of the 13 doctoral students who had a grade-point average below 3.000 cited "lacked funds," 6 of the 13 cited "dissatisfaction with the program" as a reason for leaving.

If one focuses on the most advanced students--doctoral students who have been advanced to candidacy--and groups these students into only two grade-point categories--above and below 3.500--one finds that the students with averages above were considerably less likely to cite "lacked funds" than were the others. A further division of this group by sex shows that this relationship pertains only to the men students. Seven men of the 50 with averages 3.500 and over cited "lacked funds" compared with 5 of the 8 men with averages below 3.500; while among women students at this degree level, 3 of the 12 with averages of 3.500 and over and 1 of the 6 with averages below 3.500 cited this factor.

These comparisons are included here for illustrative purposes only, for no explanation can be readily advanced for the relationships on the basis of the material included in the present study. In order to understand such relationships and some of the others indicated in this study, further investigation with a considerably larger data base would be necessary.

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Table 5

NUMBER AND PERCENT OF MEN AND WOMEN STUDENTS
WHO CITED EACH REASON FOR LEAVING

Reason for Leaving*	Number of Students			Percent of Students***		
	Men	Women	Total	Men	Women	Total
FINANCIAL FACTORS:						
Lacked funds to continue	71	35	106	26	24	25
Sought full-time employment	94	43	137	34	30	33
Job-related reasons**	10	7	17	4	5	4
Miscellaneous financial reasons**	2	4	6	1	3	1
ACADEMIC FACTORS:						
Dissatisfaction with program	48	23	71	17	16	17
Terminated by department**	4	1	5	1	1	1
Miscellaneous academic reasons**	9	8	17	3	6	4
PERSONAL FACTORS:						
Needed break from studies**	6	4	10	2	3	2
Voluntary military service	16	-	16	6	-	4
Involuntary military service	18	1	19	7	1	5
Expected to be drafted	47	-	47	17	-	11
Personal illness	9	3	12	3	2	3
Illness of another person	1	1	2	†	1	†
Marriage	19	15	34	7	10	8
Pregnancy or birth	5	7	12	2	5	3
Miscellaneous personal reasons**	10	12	22	4	8	5
UNCLASSIFIED FACTORS:						
Continued in non-registered status	115	57	172	42	40	41
Studies completed, no degree yet**	11	2	13	4	1	3
Enrolled at another institution	52	15	67	19	10	16
Enrolled for limited time only**	13	14	27	5	10	6
Unrest at Berkeley**	4	2	6	1	1	1
TOTAL NUMBER OF RESPONSES	564	254	818			
TOTAL NUMBER OF STUDENTS	275	144	419	275	144	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.
***All percentages are based on the total number of students rather than on the number of responses.
†Less than 0.5%

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Table 6A

NUMBER OF STUDENTS AT EACH DEGREE LEVEL
WHO CITED EACH REASON FOR LEAVING

Reason for Leaving*	Certificate	Masters	Begin Doct.	Advanced Doctoral		TOTAL
				Not Adv. to Cand.	Already Adv. to Cand.	
FINANCIAL FACTORS:						
Lacked funds to continue	7	53	3	27	16	106
Sought full-time employment	10	62	7	32	26	137
Job-related reasons**	-	9	-	7	1	17
Miscellaneous financial reasons**	-	4	-	2	-	6
ACADEMIC FACTORS:						
Dissatisfaction with program	5	37	6	19	4	71
Terminated by department**	-	3	-	2	-	5
Miscellaneous academic reasons**	4	6	-	4	3	17
PERSONAL FACTORS:						
Needed break from studies**	-	8	-	2	-	10
Voluntary military service	-	14	1	1	-	16
Involuntary military service	1	14	3	1	-	19
Expected to be drafted	1	36	7	2	1	47
Personal illness	-	6	2	4	-	12
Illness of another person	-	1	1	-	-	2
Marriage	3	16	3	9	3	34
Pregnancy or birth	1	4	-	3	4	12
Miscellaneous personal reasons**	4	9	-	6	3	22
UNCLASSIFIED FACTORS:						
Continued in non-registered status	7	52	3	50	60	172
Studies completed, no degree yet**	-	2	-	-	11	13
Enrolled at another institution	3	42	7	12	3	67
Enrolled for limited time only**	1	21	-	5	-	27
Unrest at Berkeley**	-	2	1	3	-	6
TOTAL NUMBER OF RESPONSES	47	401	44	191	135	818
TOTAL NUMBER OF STUDENTS	25	199	21	97	77	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.

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Table 6B

PERCENT OF STUDENTS AT EACH DEGREE LEVEL
WHO CITED EACH REASON FOR LEAVING***

(See Table 6A for Number of Students Citing Each Reason)

Reason for Leaving*	Certificate	Masters	Begin Doct.	Advanced Doctoral		TOTAL
				Not Adv. to Cand.	Already Adv. to Cand.	
FINANCIAL FACTORS:						
Lacked funds to continue	28	27	14	28	21	25
Sought full-time employment	40	31	33	33	34	33
Job-related reasons**	-	5	-	7	1	4
Miscellaneous financial reasons**	-	2	-	2	-	1
ACADEMIC FACTORS:						
Dissatisfaction with program	20	19	29	20	5	17
Terminated by department**	-	2	-	2	-	1
Miscellaneous academic reasons**	16	3	-	4	4	4
PERSONAL FACTORS:						
Needed break from studies**	-	4	-	2	-	2
Voluntary military service	-	7	5	1	-	4
Involuntary military service	4	7	14	1	-	5
Expected to be drafted	4	18	33	2	1	11
Personal illness	-	3	10	4	-	3
Illness of another person	-	1	5	-	-	†
Marriage	12	8	14	9	4	8
Pregnancy or birth	4	2	-	3	5	3
Miscellaneous personal reasons**	16	5	-	6	4	5
UNCLASSIFIED FACTORS:						
Continued in non-registered status	28	26	14	52	78	41
Studies completed, no degree yet**	-	1	-	-	14	3
Enrolled at another institution	12	21	33	12	4	16
Enrolled for limited time only**	4	11	-	5	-	6
Unrest at Berkeley**	-	1	5	3	-	1
TOTAL NUMBER OF STUDENTS	25	199	21	97	77	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.
***All percentages are based on the total number of students rather than on the number of responses.
†Less than 0.5%

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 7A

NUMBER OF STUDENTS IN EACH FIELD OF STUDY
WHO CITED EACH REASON FOR LEAVING

Reason for Leaving*	Agr. & For.	Arts	Bio. Sci.	Engr.	Lang. & Lit.	Phys. Sci.	Profs.	Soc. Sci.	Doub. Maj.	TOT
FINANCIAL FACTORS:										
Lacked funds to continue	3	3	3	13	21	10	35	17	1	106
Sought full-time employment	1	5	5	19	21	15	45	23	3	137
Job-related reasons**	1	1	-	2	2	-	9	2	-	17
Miscellaneous financial reasons**	-	1	-	-	2	-	2	1	-	6
ACADEMIC FACTORS:										
Dissatisfaction with program	5	4	2	5	12	7	24	11	1	71
Terminated by department**	-	1	1	2	1	-	-	-	-	5
Miscellaneous academic reasons**	-	-	2	2	1	4	6	2	-	17
PERSONAL FACTORS:										
Needed break from studies**	1	-	-	-	2	1	3	3	-	10
Voluntary military service	1	-	-	3	1	-	8	3	-	16
Involuntary military service	2	-	1	3	3	1	5	4	-	19
Expected to be drafted	2	-	1	12	5	6	12	8	1	47
Personal illness	-	1	1	1	-	3	5	1	-	12
Illness of another person	-	-	-	-	1	1	-	-	-	2
Marriage	1	2	1	2	9	4	10	5	-	34
Pregnancy or birth	-	-	-	1	3	3	3	2	-	12
Miscellaneous personal reasons**	2	1	-	3	3	3	8	2	-	22
UNCLASSIFIED FACTORS:										
Continued in non-registered status	4	4	10	9	25	17	57	43	3	172
Studies completed, no degree yet**	-	-	3	2	-	5	1	1	1	13
Enrolled at another institution	5	-	5	9	21	7	12	8	-	67
Enrolled for limited time only**	-	-	1	1	6	1	12	6	-	27
Unrest at Berkeley**	2	-	-	1	1	-	2	-	-	6
TOTAL NUMBER OF RESPONSES	30	23	36	90	140	88	259	142	10	818
TOTAL NUMBER OF STUDENTS	12	11	21	45	69	45	140	71	5	419

*For exact wording of questionnaire, see Appendix A
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 7B

PERCENT OF STUDENTS IN EACH FIELD OF STUDY
WHO CITED EACH REASON FOR LEAVING***

(See Table 7A for Number of Students Citing Each Reason)

Reason for Leaving*	Agr. & For.	Arts	Bio. Sci.	Engr.	Lang & Lit.	Phys Sci.	Profs	Soc. Sci.	Doub Maj.	TOT.
FINANCIAL FACTORS:										
Lacked funds to continue	25	27	14	29	30	22	25	24	20	25
Sought full-time employment	8	45	24	42	30	33	32	32	60	33
Job-related reasons**	8	9	-	4	3	-	6	3	-	4
Miscellaneous financial reasons**	-	9	-	-	3	-	1	1	-	1
ACADEMIC FACTORS:										
Dissatisfaction with program	42	36	10	11	17	18	17	15	20	17
Terminated by department**	-	9	5	4	1	-	-	-	-	1
Miscellaneous academic reasons**	-	-	10	4	1	9	4	3	-	4
PERSONAL FACTORS:										
Needed break from studies**	8	-	-	-	3	2	2	4	-	2
Voluntary military service	8	-	-	7	1	-	6	4	-	4
Involuntary military service	17	-	5	7	4	2	4	6	-	5
Expected to be drafted	17	-	5	27	7	13	9	11	20	11
Personal illness	-	9	5	2	-	7	4	1	-	3
Illness of another person	-	-	-	-	1	2	-	-	-	†
Marriage	8	18	5	4	13	9	7	7	-	8
Pregnancy or birth	-	-	-	2	4	7	2	3	-	3
Miscellaneous personal reasons**	17	9	-	7	4	7	6	3	-	5
UNCLASSIFIED FACTORS:										
Continued in non-registered status	33	36	48	20	36	38	41	61	60	41
Studies completed, no degree yet**	-	-	14	4	-	11	1	1	20	3
Enrolled at another institution	42	-	24	20	30	16	9	11	-	16
Enrolled for limited time only**	-	-	5	2	9	2	9	8	-	6
Unrest at Berkeley**	17	-	-	2	1	-	1	-	-	1
TOTAL NUMBER OF STUDENTS	12	11	21	45	69	45	140	71	5	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.
***All percentages are based on the total number of students rather than on the number of responses.
†Less than 0.5%

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 8A

NUMBER OF STUDENTS IN SELECTED GRADE-POINT AVERAGE GROUPINGS
WHO CITED EACH REASON FOR LEAVING

Reason for Leaving*	Last Reported Grade-Point Average				TOTAL
	3.500 and over	3.000-3.499	Under 3.000	Not Avail.	
FINANCIAL FACTORS:					
Lacked funds to continue	49	39	15	3	106
Sought full-time employment	68	42	24	3	137
Job-related reasons**	5	6	6	-	17
Miscellaneous financial reasons**	4	2	-	-	6
ACADEMIC FACTORS:					
Dissatisfaction with program	25	29	16	1	71
Terminated by department**	3	2	-	-	5
Miscellaneous academic reasons**	9	6	2	-	17
PERSONAL FACTORS:					
Needed break from studies**	3	6	1	-	10
Voluntary military service	4	9	3	-	16
Involuntary military service	7	8	4	-	19
Expected to be drafted	16	24	7	-	47
Personal illness	4	3	5	-	12
Illness of another person	1	-	1	-	2
Marriage	11	18	5	-	34
Pregnancy or birth	9	2	1	-	12
Miscellaneous personal reasons**	13	4	5	-	22
UNCLASSIFIED FACTORS:					
Continued in non-registered status	102	52	17	1	172
Studies completed, no degree yet**	10	1	1	1	13
Enrolled at another institution	38	22	6	1	67
Enrolled for limited time only**	15	8	2	2	27
Unrest at Berkeley**	2	3	1	-	6
TOTAL NUMBER OF RESPONSES	398	286	122	12	818
TOTAL NUMBER OF STUDENTS	223	136	51	9	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 8B

PERCENT OF STUDENTS IN SELECTED GRADE-POINT AVERAGE GROUPINGS WHO CITED EACH REASON FOR LEAVING***

(See Table 8A for Number of Students Citing Each Reason)

Reason for Leaving*	Last Reported Grade-Point Average				TOTAL
	3.500 and over	3.000-3.499	Under 3.000	Not Avail.	
FINANCIAL FACTORS:					
Lacked funds to continue	22	29	29	33	25
Sought full-time employment	30	31	47	33	33
Job-related reasons**	2	4	12	-	4
Miscellaneous financial reasons**	2	1	-	-	1
ACADEMIC FACTORS:					
Dissatisfaction with program	11	21	31	11	17
Terminated by department**	1	1	-	-	1
Miscellaneous academic reasons**	4	4	4	-	4
PERSONAL FACTORS:					
Needed break from studies**	1	4	2	-	2
Voluntary military service	2	7	6	-	4
Involuntary military service	3	6	8	-	5
Expected to be drafted	7	18	14	-	11
Personal illness	2	2	10	-	3
Illness of another person	†	-	2	-	†
Marriage	5	13	10	-	8
Pregnancy or birth	4	1	2	-	3
Miscellaneous personal reasons**	6	3	10	-	5
UNCLASSIFIED FACTORS:					
Continued in non-registered status	46	38	33	11	41
Studies completed, no degree yet**	4	1	2	11	3
Enrolled at another institution	17	16	12	11	16
Enrolled for limited time only**	7	6	4	22	6
Unrest at Berkeley**	1	2	2	-	1
TOTAL NUMBER OF STUDENTS	223	136	51	9	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.
***All percentages are based on the total number of students rather than on the number of responses.
†Less than 0.5%

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 9A

NUMBER OF STUDENTS BY HOME LOCALITY AND RESIDENT STATUS
WHO CITED EACH REASON FOR LEAVING

Reason for Leaving*	Permanent Home at Time of Admission						
	United States					Foreign Country	TOTAL
	Calif.		Out-of-state		Total		
	Res.	Non-r.	Res.	Non-r.			
FINANCIAL FACTORS:							
Lacked funds to continue	50	3	21	11	85	21	106
Sought full-time employment	71	2	29	20	122	15	137
Job-related reasons**	11	1	4	1	17	-	17
Miscellaneous financial reasons	3	1	1	-	5	1	6
ACADEMIC FACTORS:							
Dissatisfaction with program	44	1	12	10	67	4	71
Terminated by department**	4	-	1	-	5	-	5
Miscellaneous academic reasons**	11	-	4	-	15	2	17
PERSONAL FACTORS:							
Needed break from studies**	6	-	2	2	10	-	10
Voluntary military service	10	-	-	6	16	-	16
Involuntary military service	9	-	1	8	18	1	19
Expected to be drafted	20	-	3	22	45	2	47
Personal illness	5	-	2	4	11	1	12
Illness of another person	-	-	-	2	2	-	2
Marriage	22	-	3	7	32	2	34
Pregnancy or birth	8	-	2	1	11	1	12
Miscellaneous personal reasons**	12	-	3	4	19	3	22
UNCLASSIFIED FACTORS:							
Continued in non-registered status	102	2	35	11	150	22	172
Studies completed, no degree yet**	6	1	4	1	12	1	13
Enrolled at another institution	41	1	5	9	56	11	67
Enrolled for limited time only**	13	2	3	3	21	6	27
Unrest at Berkeley**	4	-	-	2	6	-	6
TOTAL NUMBER OF RESPONSES	452	14	135	124	725	93	818
TOTAL NUMBER OF STUDENTS	238	10	64	58	370	49	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis.

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 9B

PERCENT OF STUDENTS BY HOME LOCALITY AND RESIDENT STATUS
WHO CITED EACH REASON FOR LEAVING***

(See Table 9A for Number of Students Citing Each Reason)

Reason for Leaving*	Permanent Home at Time of Admission						
	United States					Foreign Country	TOTAL
	Calif.		Out-of-state				
	Res.	Non-r.	Res	Non-r.	Total		
FINANCIAL FACTORS:							
Lacked funds to continue	21	30	33	19	23	43	25
Sought full-time employment	30	20	45	34	33	31	33
Job-related reasons**	5	10	6	2	5	-	4
Miscellaneous financial reasons**	1	10	2	-	1	2	1
ACADEMIC FACTORS:							
Dissatisfaction with program	18	10	19	17	18	8	17
Terminated by department**	2	-	2	-	1	-	1
Miscellaneous academic reasons**	5	-	6	-	4	4	4
PERSONAL FACTORS:							
Needed break from studies**	3	-	3	3	3	-	2
Voluntary military service	4	-	-	10	4	-	4
Involuntary military service	4	-	2	14	5	2	5
Expected to be drafted	8	-	5	38	12	4	11
Personal illness	2	-	3	7	3	2	3
Illness of another person	-	-	-	3	1	-	†
Marriage	9	-	5	12	9	4	8
Pregnancy or birth	3	-	3	2	3	2	3
Miscellaneous personal reasons**	5	-	5	7	5	6	5
UNCLASSIFIED FACTORS:							
Continued in non-registered status	43	20	55	19	41	45	41
Studies completed, no degree yet**	3	10	6	2	3	2	3
Enrolled at another institution	17	10	8	16	15	22	16
Enrolled for limited time only**	5	20	5	5	6	12	6
Unrest at Berkeley**	2	-	-	3	2	-	1
TOTAL NUMBER OF STUDENTS	238	10	64	58	370	49	419

*For exact wording of questionnaire, see Appendix A.
**Responses entered on the questionnaire under "other, please specify" were grouped into these nine categories for purposes of analysis
***All percentages are based on the total number of students rather than on the number of responses.
†Less than 0.5%

Office of Institutional Research
University of California, Berkeley
August, 1972

Table 10

NUMBER OF FOREIGN AND NON-FOREIGN STUDENTS WHO CITED "LACKED FUNDS TO CONTINUE," BY SELECTED CHARACTERISTICS

	Foreign		Non-Foreign		All Students	
	Total No. of Students	Number Citing "Lacked Funds"	Total No. of Students	Number Citing "Lacked Funds"	Total No. of Students	Number Citing "Lacked Funds"
By sex:						
Men	40	17	235	54	275	71
Women	9	4	135	31	144	35
By degree level:						
Certificate	-	-	25	7	25	7
Masters	20	9	179	44	199	53
Beginning doctoral	3	1	18	2	21	3
Advanced doctoral, not advanced to candidacy	17	9	80	18	97	27
Advanced doctoral, already advanced to candidacy	9	2	68	14	77	16
By general field of study:						
Agriculture & Forestry	2	1	10	2	12	3
Arts	-	-	11	3	11	3
Biological Sciences	3	2	18	1	21	3
Engineering	10	6	35	7	45	13
Languages & Literature	7	2	62	19	69	21
Physical Sciences	9	3	36	7	45	10
Professions	9	4	131	31	140	35
Social Sciences	9	3	62	14	71	17
Double Majors	-	-	5	1	5	1
By grade-point average:*						
3.500 or over	33	14	190	35	223	49
3.000 to 3.499	11	7	125	32	136	39
Under 3.000	4	-	47	15	51	15
All students	49	21	370	85	419	106

*Data on grade-point average exclude 9 students (1 foreign, 8 non-foreign) for whom averages were not available.

Office of Institutional Research
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August, 1972

Table 11

TOTAL NUMBER OF STUDENTS, AND NUMBER WHO CITED "LACKED FUNDS TO CONTINUE," BY SEX, DEGREE LEVEL, AND GRADE-POINT AVERAGE*

Sex and Degree Level	Grade-Point Average						Total No. of Students	Number Citing "Lacked Funds"
	3.500 and Over		3.499 to 3.000		Under 3.000			
	Total No. of Students	Number Citing "Lacked Funds"	Total No. of Students	Number Citing "Lacked Funds"	Total No. of Students	Number Citing "Lacked Funds"		
Men:								
Certificate	3	-	1	1	1	1	5	2
Masters	43	9	53	15	22	7	118	31
Sub-total	46	9	54	16	23	8	123	33
Beginning Doctoral	7	2	6	-	4	-	17	2
Advanced doctoral, not advanced to candidacy	49	16	17	5	4	1	70	22
Advanced doctoral, advanced to candidacy	50	7	7	5	1	-	58	12
Sub-total	106	25	30	10	9	1	145	36
Total	152	34	84	26	32	9	268	69
Women:								
Certificate	5	1	11	3	3	1	19	5
Masters	35	8	30	7	12	5	77	20
Sub-total	40	9	41	10	15	6	96	25
Beginning doctoral	2	1	-	-	1	-	3	1
Advanced doctoral, not advanced to candidacy	17	2	7	2	1	-	25	4
Advanced doctoral, advanced to candidacy	12	3	4	1	2	-	18	4
Sub-total	31	6	11	3	4	-	46	9
Total	71	15	52	13	19	6	142	34
All Students:								
Certificate	8	1	12	4	4	2	24	7
Masters	78	17	83	22	34	12	195	51
Sub-Total	86	18	95	26	38	14	219	58
Beginning doctoral	9	3	6	-	5	-	20	3
Advanced doctoral, not advanced to candidacy	66	18	24	7	5	1	95	26
Advanced doctoral, advanced to candidacy	62	10	11	6	3	-	76	16
Sub-Total	137	31	41	13	13	1	191	45
Total	223	49	136	39	51	15	410	103

V. STUDENTS WHO LEFT WITH AN ACADEMIC MASTERS

Up to this point, the analysis has focused on students who left Berkeley without earning a graduate degree at the time they left and who gave reasons for leaving. In the description of the survey questionnaire, however, the reader may remember that the student who said he earned a Berkeley degree at the end of the spring or summer quarter was given the option of saying that he did not register for fall because he did not wish to seek another Berkeley degree at that time. Such students, all of whom by our definition presumably earned an M.A. or M.S., were told that they need not complete the remainder of the questionnaire.

It was not our intention in formulating the questionnaire that all students who had earned the masters would use this option. We assumed that there might be a substantial number who had hoped to continue beyond the masters, and we thought, perhaps naively, that many of these students would choose to complete the survey questionnaire and discuss their reasons for leaving. In fact, only 29 students who earned a masters took this approach, and their responses are somewhat inconclusive, so that any analysis of students with a terminal academic masters must rely on what little we can determine about the students who used the option and did not complete the remainder of the questionnaire.

In trying to obtain all available relevant information on the 358 students who selected this option, we began by consulting the Registrar's records, a process which immediately pointed out one misconception as to the composition of this group of students. We had assumed that all or almost all of these students would have earned a masters, but found instead that just 200 students had earned a degree at the end of either the spring or summer quarter--191 academic masters and 9 students who had earned either a professional masters or a doctorate and by our definition should not have been included in the study. Of the 158 who apparently had not earned a degree, further checking showed that 56% subsequently earned either a doctorate, a professional masters, or a certificate; 9% subsequently earned an academic masters; and 35% apparently had not earned a degree although their records were checked through Fall 1970. Those students who had subsequently earned degrees apparently felt that they had effectively

completed their work during the period covered by the study, and therefore fell within the spirit of the question if not the actual wording. Many of these students could have been considered as "studied completed, no degree yet" if they had chosen to respond to the questionnaire in that manner. Among those students for whom we found no record of a degree or certificate spring 1968 or thereafter were some who had earned a degree or certificate just prior to spring 1968 and may have been continuing on for a quarter or two without any very definite objective; and there were a substantial number who were in the certificate program in education, an area where various sorts of special circumstances might apply.

From the viewpoint of the present study, it is the students who left with an academic masters who are interesting. Since we have no direct evidence as to the reasoning that motivated this decision, it is very difficult to determine for these students whether the masters constituted the fulfillment of their educational goals at the time the survey was made or whether they would have continued on for the doctorate if this had been possible. During the last quarter in which they were enrolled, 96% of these students had indicated a masters as their next degree objective, and on the basis of their final grade-point average, it seems that although they were less likely to have averages of 3.5 and higher than graduate students generally, they compared favorably to the masters students in our survey who left without a degree and gave reasons for leaving as the figures in Table 12 show.

Table 12

PERCENT DISTRIBUTION BY GRADE-POINT AVERAGE
OF ALL GRADUATE STUDENTS COMPLETING SPRING QUARTER 1968,
STUDENTS WHO LEFT WITH AN ACADEMIC MASTERS,
AND MASTERS STUDENTS WHO GAVE REASONS FOR LEAVING.

Grade-Point Average	All Grad Students Who Completed Spring Quarter '68 (N = 9,174)	Students in Survey Who Left with M.A. or M.S. (N = 205)	Masters Students in Survey Who Gave Reasons for Leaving (N = 194)
3.500+	60	54	40
3.000 - 3.499	29	43	42
Under 3.000	11	3	18
Total	100	100	100

The most important finding, with respect to these students, appears to be that many of them were in majors where many students do not work for the doctorate, so that it is not unreasonable to assume that many in fact did seek the masters as their original goal (see Table 13). If this is the case, it is possible that the number of students who originally seek the doctorate but are terminated with the masters may be relatively small.

Table 13

STUDENTS WHO LEFT WITH AN ACADEMIC MASTERS
CLASSIFIED BY TYPE OF MAJOR

Type of Major	Students Who Left with an Academic Masters (N = 205)
Engineering	47%
Academic masters in a professional field (Bus. Admin. & Educ.)	11%
Masters in field where no doctorate is offered	13%
All other majors	29%
Total	100%

Appendix A

Office of Institutional Research University of California, Berkeley
January, 1969

Dear Graduate Student:

Each quarter, numerous graduate students who are eligible to register at Berkeley do not do so; for the recently completed Fall Quarter of 1968, the number of eligible graduate students who did not register was relatively larger than usual. This office is currently attempting to determine the reasons why these graduate students did not register. To do this, we need your assistance.

Our Berkeley records indicate that you were registered here during the Spring and/or Summer Quarters of 1968 and eligible to register for the Fall Quarter of 1968. These same records show, however, that you did not register at Berkeley in the Fall. We realize, of course, that you may have decided to skip that quarter or that you may have earned a degree or certificate and left. We also realize that there may be other explanations as to why you did not register. In any event, we would appreciate your carefully completing and returning to us as soon as possible the enclosed questionnaire which seeks to identify the reason or reasons why you did not register at Berkeley last term. A return envelope is enclosed for your convenience.

Thank you for your cooperation.

Sincerely,

Sidney Suslow
Director

UNIVERSITY OF CALIFORNIA, BERKELEY

Office of Institutional Research
January, 1969

To the Graduate Student:

Please complete this questionnaire to the best of your ability. Read each question carefully and indicate your considered answer where appropriate.

I. Please indicate whether either of the following statements applies to you.

Check here if this statement applies to you _____

I did not register at Berkeley for the Fall Quarter of 1968 as I planned to take the quarter off; however, I am continuing my studies at Berkeley and have registered for the Winter Quarter of 1969.

Check here if this statement applies to you _____

I received a graduate degree from Berkeley at the end of the Spring or Summer Quarter of 1968 and did not register for the Fall Quarter as I did not wish to seek another Berkeley degree at that time.

NOTE: If you check either of the above statements, you need not complete the remainder of this questionnaire. If you checked neither statement, please continue with the questionnaire.

Please enter you name here (regardless of whether or not you complete the remainder of the questionnaire):

_____

family name first and middle names

II. Please indicate by a check mark in the appropriate space, whether each of the reasons listed below influenced your decision not to register at Berkeley for the Fall Quarter of 1968.

Reason for not registering at Berkeley during the Fall Quarter of 1968	Influenced my decision	Did not influence my decision
a. enrolled at another institution	—	—
b. personal illness	—	—
c. illness of another person	—	—
d. voluntary military service	—	—
e. involuntary military service	—	—
f. expected to be drafted into military service	—	—
g. sought full-time employment	—	—
h. lacked funds to continue formal education	—	—
i. marriage	—	—
j. pregnancy or birth	—	—
k. continued studies toward degree in a non-registered status	—	—
l. dissatisfaction with the program	—	—
m. other, please specify _____		
_____	—	—

III. From the above list please select the <u>one reason that most influenced</u> your decision not to register at Berkeley for the Fall Quarter of 1968, and enter the letter preceding it in this space _____.

IV. Please answer the following questions as appropriate:

1. If you enrolled at another institution instead of registering at Berkeley for the Fall Quarter of 1968, at which institution did you enroll?

_____

Please indicate briefly your reason for enrolling at another institution.

_____

_____

_____

2. If you enlisted in military service instead of registering at Berkeley for the Fall Quarter of 1968, did you do this as an alternative to being drafted?

Yes __ No __

3. If you sought full-time employment instead of registering at Berkeley for the Fall Quarter of 1968, did you intend this to be a temporary interruption of your studies?

Yes __ No __

4. If a lack of funds influenced your decision not to register at Berkeley for the Fall Quarter of 1968, please check below the reason or reasons responsible for changing your financial support level.

__(a) an increase in University fees

__(b) unavailability of a grant, fellowship, assistantship, etc.

__(c) unavailability of employment with salary adequate to needs.

__(d) reduction of family (spouse, parents, etc.) support.

__(e) offer of better financial support from another institution.

__(f) other, please specify _____

Office of Institutional Research
University of California, Berkeley
August, 1972

Appendix B

EVALUATION OF THE SURVEY RETURN: COMPARISON OF ALL STUDENTS IN THE SURVEY, THOSE WHO COMPLETED THE QUESTIONNAIRE, AND THOSE WHO GAVE REASONS FOR LEAVING

Characteristics of the Student	All Students in Survey		Those Who Completed Questionnaire		Those Who Gave Reasons for Leaving	
	Number	Percent	Number	Percent	Number	Percent
SEX:						
Men	1,244	70	572	66	275	66
Women	545	30	293	34	144	34
Total	1,789	100	865	100	419	100
NEXT DEGREE OBJECTIVE:						
Certificate	131	7	63	7	25	6
Masters	966	54	465	54	199	47
Beginning Doctoral	48	3	24	3	21	5
Advanced Doctoral, not advanced to candidacy	372	21	158	18	97	23
Advanced Doctoral, advanced to candidacy	272	15	155	18	77	18
Total	1,789	100	865	100	419	99
DEGREE EARNED IN SPRING OR SUMMER:						
None	1,338	75	632	73	390	93
Certificate	2	†	0	0	0	0
Masters	445	25	229	26	29	7
Doctorate	4	†	4	†	0	0
Total	1,789	100	865	99	419	100
FIELD OF STUDY:						
Agriculture & Forestry	45	3	24	3	12	3
Arts	74	4	20	2	11	3
Biological Sciences	88	5	48	6	21	5
Engineering	343	19	163	19	45	11
Languages & Literature	221	12	104	12	69	17
Physical Sciences	152	9	87	10	45	11
Professions	595	34	302	35	140	34
Social Sciences	250	14	110	13	71	17
Double Majors	21	*	7	*	5	*
Total	1,789	100	865	100	419	100
GRADE-POINT AVERAGE:						
3.500 and over	914	52	480	56	223	54
3.000 to 3.499	592	34	282	33	136	33
Under 3.000	240	14	88	10	51	12
Not available**	43	*	15	*	9	*
Total	1,789	100	865	99	419	100
PERMANENT HOME:						
California	1,025	57	528	61	248	59
Other U.S.	488	27	236	27	122	29
Foreign	276	15	101	12	49	12
Total	1,789	99	865	100	419	100
LEGAL RESIDENCE:***						
California	1,275	71	658	76	307	73
Out-of-State	514	29	207	24	112	27
Total	1,789	100	865	100	419	100

†Less than 0.5%

*"Not available" category & double majors excluded from calculation of percents.

**Students who completed all course work while in masters program.

***A few students whose permanent home is shown as being in a foreign country are legally California residents.

Appendix C

COMBINATIONS OF REASONS CITED BY STUDENTS WHO
GAVE THEIR REASONS FOR LEAVING BERKELEY

Notes:

Most of the 419 students who gave reasons for leaving cited more than one reason; as a result, the variety of combinations of reasons which were cited by at least one student is considerable. This table shows, for reference purposes, each combination which was cited and the number of students who cited it.

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Appendix C

COMBINATIONS OF REASONS CITED BY STUDENTS WHO GAVE THEIR REASONS FOR LEAVING BERKELEY

No. of Students with This Comb.	Combination of Reasons Cited by the Student																				
	FINANCIAL FACTORS				ACADEMIC FACTORS			PERSONAL FACTORS								UNCLASSIFIED FACTORS				
	Lack Funds to Cont.	Sought Full-time Empl.	Job-rel. Reas.	Misc. Fin. Reas.	Dis-sat. with Prog.	Term. by Dept.	Misc. Acad. Reas.	Need Break from Stu-dies	Vol. Mil. Serv.	Involl. Mil. Serv.	Ex-pect Draft	Pers. Ill-ness	Ill-ness of An-other	Mar-riage	Preg. or Birth	Misc. Pers. Reas.	Cont. in Non-reg. Stat.	Stu-dies Compl., No Deg. Yet	Enr. at An-other Inst.	Enr. for Ltd. Time Only	Un-rest at Berk.
6	x																				
13	x	x																			
1	x	x	x		x																
1	x	x		x																	
2	x	x			x																
1	x	x			x	x					x						x				
1	x	x			x		x														
1	x	x			x		x					x			x						
1	x	x			x		x														
1	x	x			x			x									x				
																	x				
1	x	x			x						x			x	x						
1	x	x			x						x										
1	x	x			x								x								
2	x	x			x									x							
1	x	x			x									x			x				
1	x	x			x									x							
2	x	x			x									x		x				x	
3	x	x			x											x					
1	x	x				x											x				
1	x	x							x												
1	x	x							x	x	x										x
1	x	x								x											
1	x	x									x										
1	x	x									x	x									
1	x	x											x								
1	x	x												x							
1	x	x												x	x						
1	x	x												x		x					
4	x	x												x			x				
1	x	x														x					
10	x	x															x				
1	x	x																			
3	x	x																	x	x	
1	x			x																x	
1	x			x	x																
1	x			x	x																
1	x				x														x		
1	x				x									x					x		
1	x				x										x						
2	x				x												x				
5	x				x														x		
1	x								x		x										
1	x									x	x			x							
1	x										x										
1	x											x					x				
1	x														x						
1	x															x					
7	x																x				
1	x																x				x
9	x																		x		
10		x																			
3		x	x																		
1		x	x														x				
5		x			x																
1		x			x	x				x	x										
1		x			x			x						x			x				
1		x			x						x										
1		x			x						x										
1		x			x									x							
2		x			x												x				
1		x						x													
1		x						x									x				
1		x							x												
1		x							x	x	x										
4		x								x	x										
1		x								x	x						x				
7		x									x										
1		x									x			x							
2		x									x						x				

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Appendix C (Continued)

COMBINATIONS OF RE ONS CITED BY STUDENTS WHO
GAVE THEIR REASONS FOR LEAVING BERKELEY

No. of Students with this Comb.	Combination of Reasons Cited by the Student																				
	FINANCIAL FACTORS				ACADEMIC FACTORS			PERSONAL FACTORS									UNCLASSIFIED FACTORS				
	Lack Funds to Cont.	Sought Full-time Empl.	Job-rel. Reas.	Misc. Fin. Reas.	Dis-sat. with Prog.	Term. by Dept.	Misc. Acad. Reas.	Need Break from Stu-dies	Vol. Mil. Serv.	Invol. Mil. Serv.	Ex-pect Draft	Pers. Ill-ness	Ill-ness of An-other	Mar-riage	Preg. or Birth	Misc. Pers. Reas.	Cont. in Non-reg. Stat.	Stu-dies Compl., No Deg. Yet	Enr. at An-other Inst.	Enr. for Ltd. Time Only	Un-rest at Berk.
1		x												x	x		x				
2		x												x			x				
1		x														x					
18		x															x				
1		x																			
2		x															x	x			
1		x															x			x	
2		x																	x		
8			x																	x	
1			x		x							x					x				
1			x																		
1			x														x				
1				x															x		
1				x																	
4					x												x				
2					x		x														
1					x		x														
1					x			x		x	x						x				
1					x			x		x	x										
1					x									x							
1					x									x			x				
3					x																
7					x												x				
1					x														x		
1						x													x		x
1						x											x				
5							x												x		
1							x							x							
1							x							x							
1							x								x				x		
1							x												x		
1							x										x				
1							x										x		x		
2							x	x											x		
1							x	x		x	x	x					x				
4									x												
4									x												
2									x		x						x				
1										x											
1										x	x					x					
1										x	x										
5										x	x								x		
1											x										
2											x	x								x	
1												x		x		x					
1												x				x					
1														x							
2														x			x		x		
1														x	x						
2															x						
10																x					
1																x					
80																	x				
3																	x				
3																	x	x			
1																	x		x		
9																	x			x	
25																		x			
1																			x		
14																			x	x	
1																				x	
																					x
Total 419	106	137	17	6	71	5	17	10	16	19	47	12	2	34	12	22	172	13	67	27	6

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Appendix D

INSTITUTIONS SELECTED BY STUDENTS
WHO GAVE "ENROLLED AT ANOTHER INSTITUTION"
AS A REASON FOR LEAVING BERKELEY

Location and Name of Institution	No. of Students
Eastern U.S.:	
Brown University	2
Columbia University	1
Cornell University	1
Harvard University	3
New York University	1
Massachusetts Institute of Technology	1
Pennsylvania, University of	1
Pennsylvania State University	1
Princeton University	2
Rochester, University of	2
	15
Midwest:	
Chicago, University of	1
Indiana, University of	1
Iowa, State University of	1
Michigan, University of	1
Minnesota, University of	1
Ohio State University	1
Wisconsin, University of	1
	7
South:	
Florida, University of	1
Georgia Institute of Technology	1
Georgia, University of	1
Johns Hopkins University	1
North Carolina, University of	1
Texas, University of	1
	6
West:	
Arizona, University of	2
California State College--Hayward	1
California, University of	14
(Davis)	(3)
(Irvine)	(3)
(Los Angeles)	(3)
(Riverside)	(1)
(San Diego)	(1)
(San Francisco)	(1)
(Santa Barbara)	(2)
Hawaii, University of	1
Long Beach State College	1
Montana State Univeristy	1
San Francisco State College	1
Stanford University	1
Pacific School of Religion	1
Southern California, University of	1
Western Baptist Bible College & Theological Seminary	1
	25
Foreign Institutions	8
No Response	6
TOTAL	67

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Appendix E

NUMBER OF STUDENTS, BY FIELD OF STUDY AND MAJOR, WHO COMPLETED THE SURVEY GIVING THE REASONS WHY THEY LEFT BERKELEY

AGRICULTURE & FORESTRY:	
Agricultural Economics	2
Child Development	1
Entomology	5
Forestry	2
Genetics	1
Parasitology	1
Total	12
ARTS:	
Art	5
Dramatic Art	4
History of Art	1
Music	1
Total	11
BIOLOGICAL SCIENCES:	
Anatomy	2
Bacteriology	1
Biophysics	3
Botany	2
Comparative Biochemistry	1
Immunology	1
Medical Physics	1
Physiology	4
Zoology	6
Total	21
ENGINEERING:	
Civil	6
Electrical	14
Industrial-Oper. Research	6
Mechanical	11
Mineral Technology	2
Nuclear	6
Total	45
LANGUAGES & LITERATURE:	
Classics	1
Comparative Literature	10
English	14
French	12
German	6
Italian	1
Linguistics	3
Near Eastern	7
Oriental	2
Rhetoric	1
Romance Lang. & Lit.	4
Scandinavian	2
Slavic	4
Spanish	2
Total	69
PHYSICAL SCIENCES:	
Astronomy	6
Chemical Engineering	2
Chemistry	5
Geology	6
Geophysics	1
Mathematics	17
Physics	5
Statistics	3
Total	45
PROFESSIONS:	
Architecture	5
Biostatistics*	2
Business Administration	21
City & Regional Planning	6
Criminology	6
Design	1
Education	70
Environmental Health Sci.*	1
Epidemiology*	1
Journalism	3
Landscape Architecture	3
Librarianship	6
Physiological Optics+	1
Public Health	14
Total	140
SOCIAL SCIENCES:	
Anthropology	3
Asian Studies	3
Economics	7
Folklore	2
Geography	10
History	14
Philosophy	6
Political Science	7
Psychology	5
Sociology	14
Total	71
DOUBLE MAJORS	5
TOTAL	419

*Included with Public Health in Berkeley Enrollment data.

+Included with Optometry in Berkeley Enrollment data.